

## IN THE CLAIMS

Please amend the claims as indicated in the complete listing of claims listed below. This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A method, comprising:  
  
operating a control node of a communication network at a packet bandwidth wherein the control node ~~coupled to a network node~~ is located in a communication link between at least one server and at least one client ~~and wherein the control node comprises at least one control point;~~  
  
determining at least one resonance ~~point~~state of a performance metric that exhibits improved network performance metrics at the control ~~point~~node by monitoring the performance metric and scanning across a range of bandwidths ~~of the control node until an inflection point~~the at least one resonance state in the performance metrics is observed indicating ~~that the at least one resonance point is reached so~~ that one or more of the network performance metrics ~~are~~is optimized, and  
  
setting said packet bandwidth of the control node based on the at least one resonance ~~point~~state of the performance metrics that is optimized.
2. (Previously Presented) The method of claim 1 wherein the network performance metrics comprise one or more of throughput, average fetch time and packet loss.
- 3.-4. (Canceled)
5. (Original) The method of claim 1 wherein the packet bandwidth is set by varying an inter-packet delay time over selected communication links at the control node.

6. (Currently Amended) A method, comprising:
- determining at least one resonance ~~point-state~~ of a performance ~~metric-metrics~~ that exhibits an improved network performance metrics at a control ~~point-node~~ coupled to a network node inside a communication network by monitoring the performance ~~metric-metrics~~ and scanning across a range of bandwidths of the control node until an ~~inflection-point~~ the at least one resonance state in the performance metric is observed indicating that ~~the at least one resonance point is reached so that~~ one or more of the network performance metrics ~~are~~ is optimized; and
- operating ~~a~~ the control node inside the communication network at a packet bandwidth, wherein the packet bandwidth is set based on the at least one resonance ~~pointstate~~ of the performance metric that is optimized, wherein the control node is located in a communication link between at least one server and at least one client, ~~and wherein the control point is located nearby or in the control node.~~
7. (Previously Presented) The method of claim 6, wherein the network performance metrics comprise one or more of throughput, average fetch time, and packet loss.
8. (Previously Presented) The method of claim 6, wherein the packet bandwidth is set by varying an inter-packet delay time over selected communication links at the control node.
9. (Currently Amended) An apparatus to control congestion in a communication network, wherein the apparatus comprises:

a control node ~~coupled to a network node~~, wherein the control node is located in a communication link between at least one server and at least one client; ~~and a control point, wherein the control point is located nearby or in the control node,~~ wherein the control ~~point-node~~ is to determine at least one resonance ~~point-state~~ of a performance metric that exhibits improved network performance metrics, wherein the at least one resonance ~~point-state~~ is determined by monitoring the performance metric across a range of bandwidths ~~of the control node until an inflection point~~ ~~the at least one resonance state~~ in the performance metric is observed indicating that ~~the at least one resonance point is reached~~, one or more of the performance metrics is optimized, wherein the control node operates at a packet bandwidth, wherein the packet bandwidth is set based on the at least one resonance ~~point-state of the performance metric that is optimized.~~

10. (Currently Amended) The apparatus of claim 9, wherein the control ~~point-node~~ comprises means to determine ~~the~~ at least one resonance ~~point-state~~ of network performance metrics by scanning across a range of bandwidths until one or more of the network performance metrics is/are optimized.

11. (Canceled).

12. (Currently Amended) The method of claim 1, wherein said resonance ~~point-state~~ is a best observed resonance ~~point-state~~ from the at least one resonance ~~point-state~~.

13. (Currently Amended) The method of claim 6, wherein said resonance ~~point-state~~ is a best observed resonance ~~point-state~~ from the at least one resonance ~~point-state~~.

14. (Currently Amended) The apparatus of claim 11, wherein said resonance ~~point-state~~ is a best observed resonance ~~point-state~~ from the at least one resonance ~~pointstate~~.